Compressor System Modeling Using Multi-Signal Flow Graphs

- Multi-signal modeling is based on a system-level analysis of cause (a failure) and effect (an anomaly detected at an observation point)
  - Information captured in models includes structure, reliability data, and function
  - Methodology avoids the requirement of pre-defined failure modes
- Models are easy for system experts to build and analyze
  - Graphical user interface
  - Testability analysis results displayed on model
  - Unix or PC platforms

Testability Engineering and Maintenance System - TEAMS

- Commercial tool available from Qualtech System, Inc.
- Currently completing a Phase 2 SBIR through ARC.
- TEAMS capabilities include graphical creation, viewing and modification of hierarchical system descriptions, reachability analysis and failure rate propagation, test sequencing algorithms, identification of testability shortcomings, and report generation and graphical display of many parameters in the model.